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ABSTRACT

Intended to help upper elementary and secondary school teachers increase their students' critical thinking, this booklet discusses the theory and techniques behind the use of questioning to evoke prior knowledge and further inquiry. The first portion of the booklet discusses the theory and research that underlie the use of questioning, examining questioning hierarchies and how they are used. The second portion of the booklet puts this research into practice, by introducing the questioning circle--a Venn diagram of intersecting questions dealing with the subject matter, personal reality (prior learning), and external reality. The discussion adapts this structure to literature, language, and composition instruction. Managing classroom interaction, such as what to do when students cannot, do not, or will not answer, and dealing with short or wrong answers are then explored, and suggestions for encouraging student answers are supplied. The booklet concludes with a discussion on helping students generate their own questions to stimulate further critical thinking. (HTH)

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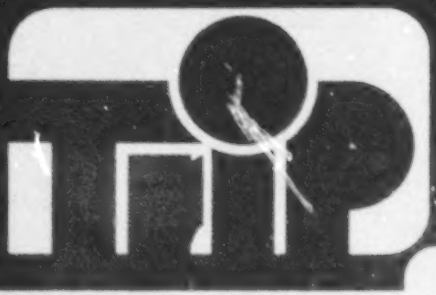

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Questioning
A Path to Critical Thinking

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To Robert C. Small, Jr., with affection and gratitude

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Foreword

The Educational Resources Information Center (ERIC) is a national information system developed by the U.S. Office of Education and now sponsored by the National Institute of Education (NIE). It provides ready access to descriptions of exemplary programs, reports on research and development efforts, and related information useful in developing effective educational programs.

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The ERIC system has already made available—through the ERIC Document Reproduction Service—a considerable body of data, including all federally funded research reports since 1956. However, if the findings of educational research are to be used by teachers, much of the data must be translated into an essentially different context. Rather than resting at the point of making research reports easily accessible, NIE has directed the separate ERIC clearinghouses to commission information analysis papers in specific areas from recognized authorities in those fields.

As with all federal educational information efforts, ERIC has as a primary goal bridging the gap between educational theory and classroom practice. One method of achieving that goal is the development by the ERIC Clearinghouse on Reading and Communication Skills (ERIC/RCS) of a series of booklets designed to meet concrete educational needs. Each booklet provides teachers with a review of the best educational theory and research on a limited topic followed by descriptions of classroom activities that will assist teachers in putting that theory into practice.

The idea is not unique. Several educational journals and many commercial textbooks offer similar aids. The ERIC/RCS booklets are, however, noteworthy in their sharp focus on educational needs and their pairing of sound academic theory with tested classroom practice. And they have been developed in response to the increasing number of requests from teachers to provide this kind of service.

Topics for these booklets are recommended by the ERIC/RCS National Advisory Board. Suggestions for topics are welcomed by the Board and should be directed to the Clearinghouse.

Bernard O'Donnell
Director, ERIC/RCS

1 Theory and Research

At the heart of a rationale for questioning is the truth of the rather paradoxical observation: "How do I know what I think until I hear what I say?"

As odd as that quotation may at first appear, most of us can verify the remark; in professional, informal, or even social conversation, many of us have been startled to hear ourselves making a statement or expressing an opinion that we did not know we actually believed until we *heard* ourselves speak. Talking—asking and answering questions—often reveals our thoughts and feelings to us as well as to others. This experience, in turn, clarifies our views and focuses our thinking.

As adults, we become accustomed to such minor epiphanies. As teachers, however, we can introduce students in our classes to opportunities for similar experiences. And the traditional, most structured way to provide such opportunities is through questioning, a path to critical thinking.

Critical thinking is a broad term variously applied to many disciplines. In the context of this discussion, critical thinking encourages students to take into account more than just content, more than just their own experience, more than just the wisdom of the world and the experience of others. Questions facilitate this intellectual process, leading students to integrate all three areas into a harmonious, and essentially individual, whole. Thus critical thinking is the student's journey through ideas, not the teacher's journey, and the student's destination, not the teacher's.

Questioning, of course, is not appropriate for all instructional situations. It is fruitless to question students when they do not have sufficient information or background to respond adequately. Second, questioning, as we will later explore, can actually inhibit student learning rather than enhance it. Finally, questioning is only one of a variety of useful strategies for effective language arts instruction.[1] Yet in countless situations in the English classroom, questioning is undoubtedly a favored—and often the most effective—teaching and learning tool. Questioning can:

Provide students with an opportunity to find out what they think by hearing what they say. In responding to questions about literature or ideas, students often discover their opinions or reactions. In responding to questions about writing, students discover their ideas in prewriting or clarify their ideas in revision. Questioning can stimulate faculties of critical thinking.

Allow students to explore topics and argue points of view. Through questioning, students can pursue an aspect of a topic that appeals to them or can logically defend a theory or belief that they hold, thus sharpening thinking skills.

Allow students to function as experts. In a well-run classroom, students as well as the teacher can question, probe, explore, and in essence guide the discussion into specific areas.

Give students the opportunity to interact among themselves. Given the proper setting, students can—and will—argue and debate with one another. Student talk is useful and provides a stimulus for learning as well as an impetus for further exploration of topics.

Give the teacher immediate information about student comprehension and learning. Through judicious questioning and careful attention to student answers, the teacher can determine if students have comprehended an assignment, if they have completed it, or if they are ready to move on to another topic. Questioning, then, serves as an effective diagnostic tool.

Research on the use of questioning in the language arts classroom has centered on two areas, reading comprehension and composition. Research on reading comprehension shows undisputed benefits from asking questions: questions help students comprehend content, and students who use questions learn more subject matter than students who do not use questions.[2] As early as 1917, educational psychologist Edward L. Thorndike suggested that the use of questions and oral exercises can improve reading comprehension.[3] Studies conducted in 1929 and in 1931, as well as more recent ones, suggest that "experimenter-constructed questions facilitate comprehension and recall of textual materials."[4] In addition, research indicates that when the questions are given after the material and require the students to *construct* answers rather than *choose* from multiple-choice answers, the benefits tend to be stronger.[5] Norman E. Wallen and Robert M. W. Travers showed that students "will learn more efficiently" if they "make the responses to be learned" rather than "observing another make the response" or making "some related response."[6] Thus, when

students directly answer questions, they are learning more efficiently. Finally, James R. Squire's observation that students' responses change while they read is relevant to the subject of questioning. Students have many responses to a text; through questioning, these multiple responses can be elicited and discussed.[7]

English teachers must be aware that questioning reinforces rather than teaches reading skills. As Harold L. Herber and Joan B. Nelson point out, "reading skills are implicit in the application of questions to text materials."[8] Therefore, if a student does not have strong reading skills, questioning per se will not provide those skills. Herber commented in an earlier work:

> If questions are used to teach students how to read material, they are being misused. If they are being used to reinforce skills which the students already have, they are being used well. Questions are of doubtful value only when they are used assumptively. When questions assume possession of skills not yet taught or learned, they are assumptive.[9]

The research on questioning techniques in the area of composition yields some evidence that questioning is beneficial. Mimi Schwartz notes that questioning and talking "reduce the prewriting tension of not knowing what to write about,"[10] and Robert Zoellner, in his widely read article "Talk-Write," suggests that students use questioning and responding as a way of improving composition.[11] In Zoellner's study, each student was paired with a second student to talk about the composition before writing and to respond to the other student's content questions. Students then reversed roles and repeated the questioning process. The questioning and answering, according to two adaptors of Zoellner's method, supplied the "initial material for the learning sequence," provided the writer with "immediate help and reinforcement," and encouraged a variety of answers.[12]

Questioning, then, helps students discover their own ideas; it gives students an opportunity to explore and argue and to sharpen critical thinking skills; it allows students to function as experts and to interact among themselves; it gives the teacher invaluable information about student ability and achievement. Questioning also aids students in the comprehension of content, and it can counteract writing anxiety or general writing difficulties.

Questioning Hierarchies

Almost every text or article that includes a discussion of questioning also includes an obligatory hierarchy, scale of importance, or cate-

gorical schema of question types. As in many fields of intellectual endeavor, certain kinds of knowledge—and the answers to certain kinds of questions—are considered superior to, more sophisticated than, or requiring higher cognitive skills than certain others.

Following this principle, most creators of questioning hierarchies suggest that teachers ask questions at the lowest level of the scale and then move up, spending the majority of questioning time in the upper reaches of the questioning hierarchy. If classroom interaction could be convincingly ranked in established categories, then questioning hierarchies, we feel, would be indispensable. Hierarchies, however, should be viewed as descriptions of cognitive processes rather than as prescriptions for classroom questioning strategies. In fact, except at the lowest or factual level, numerous studies proved unsuccessful in classifying questioning levels in actual classroom discussions.[13]

Because we do feel that questioning hierarchies, if used with judgment, have some value, we present a few of the major ones, both sequential and nonsequential, below. In the Practice section, however, we offer our own questioning schema, the Questioning Circle. We feel the Questioning Circle avoids some of the problems of questioning hierarchies and provides a more practical approach for the English teacher.

Sequential Hierarchies

Benjamin Bloom[14]	*Norris M. Sanders*[15]	*Hilda Taba*[16]
To know	Memory	Form concept
To comprehend	Translation	Interpret concept
To apply	Interpretation	Apply concept
To analyze	Application	*Harold L. Herber*[17]
To synthesize	Analysis	Literal comprehension
To evaluate	Synthesis	Interpretative comprehension
	Evaluation	Applied comprehension

Nonsequential Hierarchies

Arthur Kaiser[18]	*Richard Smith*[19]	*Ronald T. Hyman*[20]
Open	Convergent	Definitional
Closed	Divergent	Empirical
Suggestive		Evaluative
Rhetorical		Metaphysical

We believe that many such questioning hierarchies are essentially arbitrary, as is the advice that a teacher should ask only "A" type questions at the beginning of a discussion or an assignment, gradually move to "B" type questions, and then advance to "C" type questions.

While some order of questioning is necessary—and a mixture of question types (however those types are defined) is essential—it seems that discussion and questioning in the language arts classroom need not be so rigidly organized as some theorists and practitioners would imply. Indeed, as this section indicates, not only are many hierarchies of questions overlapping and occasionally even contradictory, but the very evidence that using the so-called higher level of questions actually results in "higher" student achievement is disputed by some research studies.

One obvious drawback to questioning hierarchies is their dependence on extensive lists of questions prepared by the teacher so that each category or level is sufficiently "covered." In addition, even if one were willing to prepare questions for each category, some categories are ambiguous and difficult to distinguish. For example, the difference between *analysis* and *interpretation* is probably the province of the semanticist: we analyze when we interpret and we interpret when we analyze. When does one function stop and the other begin?

While many of the authors of questioning hierarchies would be the first to caution against using them rigidly, many questioning schemata have been abused and have become prescriptions rather than suggestions or guidelines. Indiscriminant faith in any questioning hierarchy is foolish, we feel, for two major reasons.

First, most hierarchies imply that one category is superior to another. Yet there is no evidence, for example, that the cognitive sophistication required to apply a concept is inferior to the ability to synthesize that concept (see the Sanders hierarchy) or that analyzing a concept is superior to comprehending it (see the Bloom taxonomy). As a result, there is no assurance that a student's mind will be more receptive to one type of question at one point in a discussion than to another type of question at another point.

Second, the hierarchies also suggest an orderly progression from one level to another in all discussions, a progression that does not always occur in real classrooms. Students often "ping pong" from one category to another. Is it wholly unlikely that in the middle of a supposedly "higher-level" literature discussion a student might return to question an aspect of the plot? Might a student begin a discussion by asking, "Why did he let her do that to him?" and then launch into an analysis (evaluation? application? interpretation?) before the basic "recall" hierarchy has even been initiated? The answer, it seems, to both questions is "yes." Finally, our objection to a strict implementation of questioning hierarchies is that they imply a linear or sequential theory of learning, a theory that we reject.

In discussing their schema of questioning, Robert J. Nash and David A. Shiman point out that their tripartite division of factual, conceptual, and contextual questions should be used only loosely:

> The effective questioner moves back and forth among the factual, conceptual and contextual modes. Some educators are more comfortable starting with the factual, while others like to plunge right into the contextual. This does not imply the absence of goal-setting in the questioning process. Instead, we are recommending that goals be tentative, self-dissolving when discredited or reached, and intimately related to young people's real concerns.[21]

Additionally, in some questioning hierarchies the schemata include a distinction between "open" or divergent questions and "closed" or convergent questions. It is clear that certain questions ("Why is this a great novel?") allow for far less discovery and difference of opinion than others ("If you could, what would you change about this novel and why?"). Open questions ask for new information, the solution to complex problems, the development of possibilities, the expression of opinion.[22] Closed questions, however, ask for short, specific information, check assumptions, force students into alternatives, and often guide conversation.[23] There is obviously a place for each type of question. It is interesting to note that one recent article asserts that teachers and students vary markedly in their perception of open and closed questions. Students, in general, find closed questions restrictive and thus frustrating; many teachers, on the other hand, find open questions frustrating, especially when confronted with student responses based on "hot air."[24] Despite these preferences, there is little justification for totally confining classroom questioning to either the convergent or divergent mode.

As noted before, one major justification for extensive use of questioning hierarchies is that so-called higher-level questions result in "higher" student achievement; many feel that students who answer higher-order questions extensively will more frequently exercise higher-order thinking skills. The theory is summarized by Marli Andre and Thomas H. Anderson:

> High-level questions—questions which require comprehension of the text and application of principles and concepts to new situations—seem to prompt more thorough study and thus improve learning and retention.[25]

Robin McKeown, a social science teacher, also found that "student attitudes are significantly affected by the level or type of question students encounter in the classroom" and that higher-level questions

seem to make students change "their social attitudes to a greater extent."[26] Yet a recent article on the subject seems to cloud some of the above findings. Philip H. Winne, looking at eighteen studies on questioning and its effect on student achievement, found that there could be no "sturdy conclusion" regarding the relation of higher-order questions and student achievement.[27] Winne's findings are confirmed by a study by William W. Wilen, who found that students did not show a preference for higher-level questions and that those students who preferred their teachers to ask low-level questions performed best on tests incorporating correspondingly low-level questions. Thus, Wilen concluded, "teachers' use of higher, cognitive-level questions is more positive in theory than practice."[28]

These studies require us to be cautious in assuming that extensive use of higher-order questions will always result in increased learning and will always be favored by students. There are, nevertheless, other reasons for using such questions—they may in fact reflect instructional or student needs—but there is no necessity to assume that such questions will automatically result in certain levels of achievement or that they will be more acceptable or interesting to students.

What, then, can be proposed about the kinds of questions we should ask in the language arts classroom?

Use a questioning schema, but don't let it use you. Know your classroom, your students, and your instructional goals. If a schema (or more than one) meets your requirements, then use it (or them). Write out your questions or keep a file card of questioning levels in front of you as you lead a discussion or construct questions for an assignment. Remember, however, that questioning schemata are guidelines, not rules.

Follow your students' lead. If you want to talk about the imagery of a poem but the students are more interested in the theme, do not force the conversation in your direction. You will find that the discussion is more fruitful if students are first allowed—within limits, of course—to discuss what interests *them*.

Be flexible with your questions. Writing out everything you are going to ask in a semblance of order may be useful, but don't expect the discussion to follow your list precisely. Don't let your prepared questions become an obstacle to change or modification.

Don't always play it safe. Many cautious teachers confine all of their questions to the safe or purely factual areas ("Who wrote it?" "Where is the dipthong in this word?" "What is the topic

sentence in this paragraph?").[29] While these kinds of questions have their places, so do the open or divergent questions that give students the opportunity to confront multiple answers or interpretations. Interestingly, some research shows that lower-ability students benefit the most from higher-order, open questions, although most teachers tend to use lower-order questions with such students.[30]

How to Use Questioning

Probably the most popular area of research on the strategy of questioning is the subject of wait time, the time between a teacher's question and a student's answer or between a teacher's first and second questions. The time factor is crucial: a lack of sufficient wait time can completely abort an oral discussion. Ronald T. Hyman notes:

> Rowe and Lake investigated the amount of time teachers wait when asking a question. They found that if students do not begin a response within one second, teachers usually repeat the question or call upon another student to respond. Also, after students respond, teachers wait slightly less than one second before reacting to the response, asking another question, or launching to a new topic.[31]

Rowe and Lake also found that when teachers increased their wait time to a mere three to five seconds, the length of responses increased, unsolicited but appropriate responses increased, and "failure to respond decreased."[32] Obviously, insufficient wait time creates a rather frenetic atmosphere in which students feel they must quickly volunteer an answer—any answer. Silence, something that many teachers assume to be a sign of failure in discussion, can actually be a sign of a particularly healthy discussion and can indicate a teacher's use of judicious wait time while students are thinking. Silence is not always an indication of ignorance, refusal, or intransigence. To the contrary, it is often a necessary time to meditate, reflect, punctuate an idea, breathe.

Research has also been conducted on the frequency of questioning. Seymour Sarason found that elementary teachers who thought they were asking 12 to 20 questions every half hour were actually asking 45 to 150.[33] J. T. Dillon makes a salient point:

> [Research] is either inconclusive or fails to support the many claims made for the efficacy of teacher questions. On the other hand, certain studies report undesirable effects. For example, high rates of questioning may yield negative affective outcomes, en-

> courage student passivity and dependence and make the class appear as if it were an inquisition rather than a reasonable conversation.[5]

Certainly this seems true in Sarason's study. According to his figures, it is possible that some elementary students were confronted with a new question every twelve seconds. In this kind of inquisitorial atmosphere, questioning can actually discourage class discussion and can cause students to feel assailed and threatened.

In summary, teachers use questions in the English classroom because questions help students learn and develop critical thinking skills. The kinds of questions we ask should not be rigidly determined by any one hierarchy but should be varied and appropriate to the subject matter and to student interests. When we ask questions, we should give students time to think about the answers, not bombard them with countless inquiries. Moments of silence and meditation should punctuate the discussion.

If we could suggest a model for the kind of questioning atmosphere we have in mind, it would be akin to a conversation with friends. In such conversation, we talk as equals, encouraging others' comments, allowing others to wander off onto points that interest them, and pausing between ideas. We do not dominate or allow our friends to dominate; we create a genuine give-and-take atmosphere, allowing the conversation, as in all human interchange, to swell, trail off, and even fall silent. In such a climate, and given a topic of mutual interest, it is hard to imagine questioning that would fail to arouse interest or further learning.

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2 Practice

"Ask, don't tell" could serve well as the motto of those committed to questioning. And, indeed, it is preferable to ask for information, encouraging students to generate ideas, than to expect students to be passive repositories, automatic scribes of what teachers might say in class. And while questioning is not the sole instructional methodology, it remains a staple of the English language arts classroom. Questioning, however, is more than simply phrasing a query; it involves

> asking questions in a logical format that is part of an overall structure or plan
>
> dealing creatively with insufficient answers, no answers, or incorrect answers
>
> encouraging student answers
>
> helping students to generate questions

While questioning can indeed become a path to critical thinking, if it is mismanaged either in conceptualization (forming the questions) or in practice (using the answers), then the process can become more a rote exercise in asking and answering than a learning and exploring venture.

This section will discuss the four aspects of questioning listed above and will offer what we hope is useful, practical advice.

The Questioning Circle

The Questioning Circle, an alternative to sequential and hierarchical schemata, is a model for developing instructional questions. We define the varying areas of questioning in the form of overlapping circles, a representation that we feel more nearly approximates the reality of the questioning process. Nonsequential and overlapping, the Questioning Circle (Figure 1) provides a logical, yet flexible, format for questioning.

The schema is composed of three circles: the *matter, personal reality,* and *external reality.* The first circle, the matter, represents the subject of discussion or questioning. The second circle, personal reality, represents the individual's experiences, values, and ideas. The third circle, external reality, is, for want of a better term, the "world": the experience, history, and concepts of other peoples and cultures.

We contend that conceptualizing the questioning process in the form of these three circles is useful. While each circle represents a different domain of cognition, the circles overlap—as does knowledge—and are not ordered. Further, in the one area where all three circles intersect lies the union of the subject being explored, the individual's response and experience, and the experience of others. The intersection of the three circles, the area we term *dense,* contains the most significant (higher-order) questions; but while the dense questions are richer than the others, it is clear from the model that when or how students arrive at the answers to these questions is left open.

If, however, there can be a suggested procedure for using the Questioning Circle, it would be that an instructional goal should include not only questions in the three separate circles (the matter, personal reality, external reality) but also questions in the areas where the three circles intersect. In the three shaded areas—combining the matter with personal reality, personal reality with external reality, and external

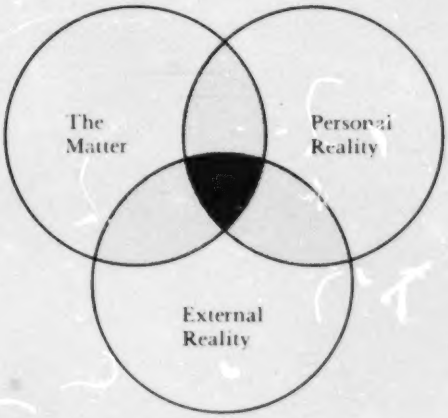

Figure 1. The Questioning Circle.

reality with the matter—the components collide, mingle, and ultimately enrich each other. Finally, the area where all three circles intersect, the dense area, represents the central, most important questions, the questions that subsume all three areas and whose answers provide the deepest consideration of the issue.

The order of questions depends upon the material under consideration, upon the teacher, and upon the students. For example, the first question in a series may be a question from a shaded area followed by one from the dense area, followed by a question from a white area of one of the three circles. It is also, we stress, quite possible to ask a question from the dense area at any time in a discussion or questioning process and, indeed, to ask such questions repeatedly throughout the questioning process. Alternating questioning areas thus causes the complex and central dense questions to be answered with added perception, knowledge, and understanding. Students, of course, may also want to move back and forth among the three areas—white, shaded, and dense—and to return a number of times to consider a previous question from the dense area.

The Questioning Circle, lacking the defined abstractness of hierarchies, is flexible. English teachers may find it particularly adaptable for literature, language, and composition. For example, in literature, the *matter* would be the *text; personal reality* that of the *reader;* and *external reality* that of the *world* and *other literature.* In language, the *matter* would be the *concept* or *idea* under study; *personal reality* that of the *speaker/reader/writer* of language; and *external reality* the language as it is used outside the speaker/reader/writer's environment, the *world.*

In composition, we must divide the circles further to account for the different demands of prewriting and revision. In prewriting, the *matter* becomes the *subject* of the proposed composition; *personal reality* would be that of the *writer; external reality* would be the *audience* of the intended composition. In the revision stage, the *matter* becomes the *rough draft,* but the *personal reality* and *external reality* remain the same as in prewriting, i.e., the *writer* and the *audience,* respectively. Table 1 summarizes the Questioning Circle's flexibility. Illustrations of the use of the Questioning Circle in literture, language, and composition follow.

Literature

The Questioning Circle adapts easily to the study of literature in the English classroom. Indeed, it might be interpreted as a practical illustration of Louise M. Rosenblatt's theory of personal response to

Table 1

Components of the Questioning Circle

General Terms	The Matter	Personal Reality	External Reality
Literature	The Text	The Reader	The World/Other Literature
Language	The Concept	The Speaker/ Reader/ Writer	The World
Composition/ Prewriting	The Subject	The Writer	The Audience
Composition/ Revision	The Draft	The Writer	The Audience

literature (*Literature as Exploration*, New York: Noble and Noble, 1976). Using the Questioning Circle, the *matter* is the text; *personal reality* is the *reader;* and *external reality* is both the *world* and *other literature.* (See Figure 2.)

The adaptability of the Questioning Circle can be demonstrated by using Mark Twain's novel *The Adventures of Huckleberry Finn* and Robert Frost's poem "Stopping by Woods on a Snowy Evening." The questions are offered as suggestions for a class discussion or written assignments, and although the dense questions are considered

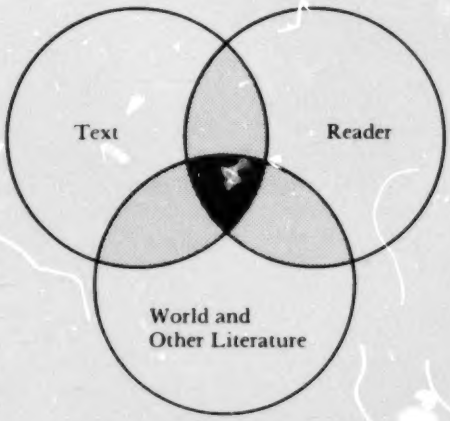

Figure 2. Literature and the Questioning Circle.

the most complex, there is no other suggested order for the questioning process.

The following questions apply to a single incident in *Huckleberry Finn*, albeit an incident that is resonant with implications for discussions:

White Questions

The Matter: What does Huck say when he decides not to turn Jim in to the authorities?

Personal Reality: When would you support a friend when everyone else thought he or she was wrong?

External Reality: What was the responsibility of persons finding runaway slaves?

Shaded Questions

The Matter/Personal Reality: In what situations might someone be less than willing to take the consequences for his or her actions?

Personal Reality/External Reality: Given the social and political circumstances, to what extent would you have done as Huck did?

The Matter/External Reality: What were the issues during that time which caused both Huck's and Jim's actions to be viewed as wrong?

Dense Question

The Matter/Personal Reality/External Reality: When is it right to go against the social and/or political structures of the time as Huck did when he refused to turn Jim in to the authorities?

While the previous examples of questions pertaining to *Huckleberry Finn* address a single, although highly significant, incident in the novel, the following series of questions addresses the entire poem "Stopping by Woods on a Snowy Evening":

White Questions

The Matter: Can you summarize what happens in the poem?

Personal Reality: Is there anything that happens in the poem that has ever happened to you?

External Reality: How would you compare this poem to Frost's "The Road Not Taken"?

Shaded Questions

The Matter/Personal Reality: To what extent does the person's experience seem convincing to you?

The Matter/External Reality: What is the poem saying about life? responsibility? duty?

External Reality/Personal Reality: When has responsibility conflicted with your personal needs?

Dense Question

The matter / Personal Reality / External Reality: How do you think most people make a successful compromise between duty and personal happiness?

Developing questions for other works of literature is not difficult. While a teacher may choose to write questions for each area—white, shaded, and dense—and thus draw ideas together, it is evident that the dense question subsumes facets of all other questions. A discussion or questioning exercise with that question as the focal point should elicit the information that would evolve if the other questions were asked separately. As a facilitator, the teacher knows the components of the question and can shift the discussion to an important component that has not been examined. Posing a dense question early in the discussion permits students to respond from a variety of perspectives: the text, personal experience as a reader, external reality of the world and other literature. Thus students have a basis for responding even if it is entirely personal, and the discussion builds on a variety of perspectives.

There is another reason for using a dense question early in the class discussion. If a teacher using a hierarchical schema carefully orchestrates the questions from lower order to higher order and then springs the "big question," the effect on students is often not a positive one. To answer the "big question," the class needs to repeat the ground already covered; to many students this hardly seems worth the effort. We suggest, therefore, that the dense question be used as the basis for ongoing discussion rather than the culminating question used late in a questioning sequence.

How would a discussion based on the Questioning Circle and using a dense question early in the conversation proceed? We used the widely anthologized short story by Evan Hunter, "On the Sidewalk Bleeding," and generated the following questions:

White Questions

The Matter: Why do the boy and girl refuse to help Andy?

Personal Reality: When have you helped someone in need?

External Reality: How are gangs viewed by society as a whole?

Shaded Questions

The Matter / Personal Reality: Under what circumstances would you be hesitant to help someone in need?

The Matter / External Reality: How would the police in our town view Andy?

Personal Reality / External Reality: How do you view gang members?

Dense Question

The Matter/Personal Reality/External Reality: If you were not a gang member and found Andy stabbed and lying in the street, why or why not would you help him?

Using these questions, a volunteer teacher discussed "On the Sidewalk Bleeding" with his class for fifteen minutes. In the discussion, 60 percent of the students contributed responses, and the amount of student talk was about ten times that of teacher talk. More importantly, however, with the dense question as a focal point, the discussion of the story was comprehensive and covered, through specific student responses, all of the shaded questions and, by implication, the white questions as well. The teacher, despite reflective comments, confined his inquiry to a single dense question, a question that led students through the major points of the short story.

We feel it is possible to replicate this successful discussion. The teacher who uses the dense question, rich in its implications and complex in its answer, can skillfully guide the discussion. The following transcript of the discussion of "On the Sidewalk Bleeding" shows how the dense question focuses student attention on all areas.

Teacher: If you were not a gang member and found Andy stabbed and lying in the street, why or why not would you help him?

Student 1: You know, when you get into a situation, you don't know what you would do, but I think if I had been that girl or that guy, I would have helped him because I couldn't have that on my conscience.

Teacher: You would have helped?

Student 2: I don't think I would.

Student 1: I would have no matter what. There's no doubt in my mind.

Student 3: I would help no matter who they were.

Student 4: I would at least call the police. They said they were afraid that the police would leak it out, but I don't see how they could know.

Student 5: But the police at the end goes, "a Royal," and the girl says, "His name is Andy," and the police says, "A Royal."

Student 6: Give him a name anyway.

Student 5: He didn't give much thought to him like anybody else.

Student 7: I think it's sad because the cop, like all policemen even, just didn't care. Like this was a human life.

Student 8: I don't see how anyone could live. I would go bananas wondering what ever happened to him or later read in the papers somewhere about Andy, a Royal, knifed in an alley, and you knew you could have helped, and he died.

Teacher: That would bother you? (*Silence*)

Student 9: But I don't think Andy's girlfriend ever thought of him as a Royal; that was just a group he was in. She just thought of him as Andy.

Student 6: Maybe like she knew when he first became a Royal, he was really into it and proud of it.

Teacher: Why was he proud of it?

Student 6: He wanted to equate himself with a group, identify with somebody. Like at first he was so hepped up on it that it would have been unlikely that he would have taken off his purple silk jacket; for him to take it off, it must have meant that he didn't want to be that any more; he wasn't proud of it any more.

Student 4: He didn't feel that was much to live for or rather to die for—the jacket wasn't much to die for.

Student 7: I think it's sad that all those regrets right before he died—lots of things he hadn't done.

Looking at this excerpt, we see that the teacher initiates the discussion with the dense question, a question that obviously stirs student interest, judging by the number of students who contribute to that one item of discussion. During this discussion, different students address issues that are questions from the shaded portion of the Questioning Circle. While white questions are not included in this discussion, it should be clear that students either knew the answers (why the boy and girl refuse to help Andy is obvious) or were not at this juncture interested in further exploration (how gangs are viewed by society or revelation of personal experience helping others).

Much of the excerpted discussion, which is not "covered" by any of the teacher-created questions, is nevertheless a useful consideration of the implications of the short story and further enriches understanding. Interestingly enough, the comments also relate to the dense question of motivations for helping Andy.

Language

The principles of the Questioning Circle can also be adapted to the study of language in the English classroom. The *matter* is the *idea* or *concept* of language study; *personal reality* is that of the *speaker/reader/writer* of language; *external reality* is that of the *world* and the many different manifestations of language. (See Figure 3.)

To construct sample questions in the area of language, we might choose the topic of dialect and generate the following questions:

White Questions

The Matter: What other words name a *porch*?

Personal Reality: Do you use the word *porch* or some other word?

External Reality: Do the people in our area use the word *porch* or some other word? What about other areas?

Shaded Questions

The Matter/Personal Reality: Is your pronunciation of *heart* in the dictionary?

The Matter/External Reality: What are examples of variations in pronunciations in other parts of the country?

Personal Reality/External Reality: What are examples of your word choices and pronunciations that are the same elsewhere in the country?

Dense Question

The Matter/Personal Reality/External Reality: If word choices and pronunciations vary in certain regions, what can you conclude about language use in our country?

Again, the dense question is the one of most interest. As in the sample literature discussion, it can be used throughout the questioning process.

Composition

The Questioning Circle must be subdivided for composition. In prewriting, the *matter* is the *subject* of the proposed composition. (See Figure 4.) In revision, however, the *matter* is the *draft* to be revised. (See Figure 5.) *Personal reality*, that of the *writer*, and *external reality*, the *audience*, would be the same for both prewriting and revision.

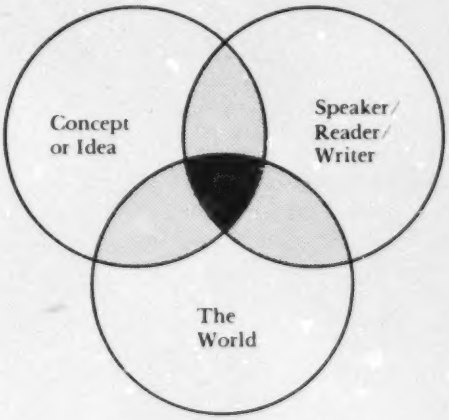

Figure 3. Language and the Questioning Circle.

Unlike literature and language, where the questions will vary according to the text or the concept under study, the questions offered for composition can be adapted to any assignment:

Prewriting: White Questions

The Matter: What is my subject?
Personal Reality: What is my experience?
External Reality: Who is my audience?

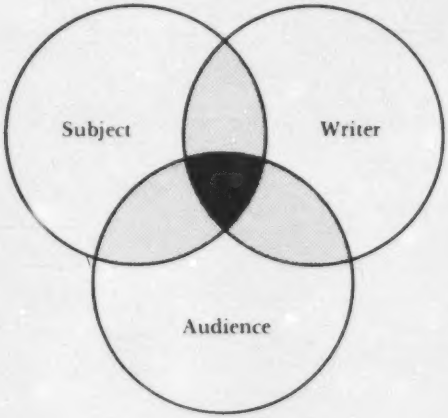

Figure 4. Prewriting and the Questioning Circle.

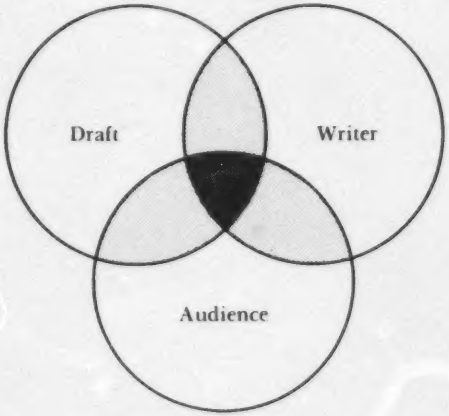

Figure 5. Revision and the Questioning Circle.

Shaded Questions

The Matter/Personal Reality: What experience do I have with this subject?

Personal Reality/External Reality: How does my experience relate to the experience of my audience?

The Matter/External Reality: What would my audience think of this subject?

Dense Question

The Matter/Personal Reality/External Reality: Which of my experiences can I present that will persuade/inform/amuse (whichever is appropriate) my audience?

Revision: White Questions

The Matter: The Draft

Personal Reality: The Writer

External Reality: The Reader

(Questions are not necessary at this stage)

Shaded Questions

The Matter/Personal Reality: In what ways does the draft say what I want to say?

Personal Reality/External Reality: To what extent could the reader understand my ideas?

The Matter/External Reality: How thoroughly does a reader understand the written draft?

Dense Question

The Matter/Personal Reality/External Reality: What adjustments have to be made to integrate my intentions with the reader's perceptions?

Once a teacher has devised dense questions covering the three areas of the matter, personal reality, and external reality, the questioning process can be simplified. The dense questions will naturally encompass other, less broad areas. The very small number of teacher-prepared questions actually liberates an instructor from a complicated, sequenced list. Armed, so to speak, with only a very few, albeit highly significant, questions, the teacher relies more on student comments and on conversational direction and less on predetermined paths of discussion.

Managing Classroom Interaction

We would be less than honest if we did not detail what we see as problems with the questioning process and with the overuse or

misuse of questions. First, as mentioned before, it has not been proved in any study that questioning is the best teaching or learning strategy. For certain subject matters, in certain classroom settings, with certain types of student learners, questioning can work well. Undeniably, questioning is the most popular teaching tool of the language arts instructor. Yet it is foolish to use questioning in all situations or in all settings because questioning has no proven superiority over other methodological strategies. There are several reasons *not* to use questioning:

> *Questions can be threatening to students.* The posing of a question (and the accompanying expectation of an answer) can put a great amount of pressure on certain students in certain subject areas. Under some circumstances, questions can in fact inhibit learning and can foster a tense classroom atmosphere. Some students see questions as a punitive device; indeed, some teachers question certain students more to establish order and discipline than to advance learning.
>
> *Questions can be threatening to teachers.* The very act of asking a specific question requires that the teacher be able to judge the relative "rightness" or "wrongness" of an answer. Indeed, in some areas of instruction, a response to a question requires that a teacher rather skillfully *use* the answer in some creative manner, linking it with another concept, turning the answer to the attention of a second student, and so forth. The process can be a difficult one.
>
> *Questions may encourage teacher dominance.* If all questions come from the teacher, then the teacher must be the arbiter of all answers and classroom concerns. When all attention is centered on the teacher, questions may militate against a student-centered, student-concerned learning environment.

With these limitations in mind, we offer some practical advice for managing classroom interaction and classroom questioning and answering.

What To Do When Students Can't/Don't/Won't Answer

When students *cannot* answer a question, it could be because the question as posed is unclear. Many times we find ourselves asking vague questions, questions that confuse students. In a discussion of Arthur Miller's *Death of a Salesman*, we might ask, for example, "What did Willy Loman do to his son Biff?" A restatement ("In what ways did Willy shape Biff's values?") clarifies the question. Another

problem we instigate is the multiple question, an inquiry that asks two things at once, thus causing a student to hesitate over a response ("What are the things Willy lied about to his wife, and why did she accept his lies?"). A solution would be to separate the two questions. Also, we teachers may ask a question that is simply too difficult for our students at this point in the instruction or in their developmental level. An example of the latter, using the Questioning Circle, is the expectation of a complete answer to a dense question early in a discussion or assignment ("What do Willy's various lies tell you about certain values in American society?"). Students might be unable to answer certain questions because they have not been prepared sufficiently. Unless there is a specific negative chemistry working in a classroom, or perhaps individual problems with a class, most students' inability to answer a question lies with the question itself or the level of the question.

Sometimes when students *do not* answer a question, it may be that they did not hear the question or did not understand it. Repeating the question a second time or rephrasing it may be helpful. Both of these tactics, however, should be deferred until the proper wait time has elapsed. If you are unsure about the time elapsed, counting to yourself before you rephrase or repeat the question can be useful.

If students simply *will not* answer questions, there may exist a classroom atmosphere of hostility or fear. Students' responses of silence may be directed to the subject or the teaching strategy. In the first case, teachers may try to refocus the subject. However, teachers may be dealing with students for whom questions are not opportunities to explore but are occasions of tension and anxiety. Changing the methodology to one where direct questioning is avoided may be the only solution with such students.

Short Answers/Wrong Answers

Teachers sometimes encounter problems managing classroom interaction when students give very short answers or totally wrong answers. Oddly enough, teachers may cause students to give brief answers. Without being fully aware of it, many teachers may begin to speak before a student has finished, thus cutting off the response. In addition, many teachers break eye contact with the student responder, which decreases the length of the student response. Finally, some teachers unconsciously turn away from student responders or turn their backs on them. Even the act of placing part of the student's answer on the board—what we may initially think is a reinforcement of that answer—can distract student responders and cause them to

stop talking. Common sense is the rule: students will not continue talking if they feel they are losing—or have lost—their audience. And because the major audience is often the teacher, teacher behavior can influence the length of student answers.

To lengthen student answers, positive reinforcement can be provided in more ways than mere body language. Nodding, making positive verbal noises, asking a student to expand or clarify an answer may help. Statements such as "Can you give an example?" or "I don't understand; could you restate that?" can be useful. In the case of extremely brief answers, these strategies may encourage longer responses.

Wrong answers present a problem to most teachers because, frankly, we do not like to be in the position of telling students they are incorrect. Nevertheless, honesty is the best policy. If you give the outward impression that every student answer is right in varying degrees, then you are not being fair. "No, I don't think so" or "I'm not sure" may be gentler ways of telling students they are in error. Also, when a student response is misguided or mistaken, there is often alternative evidence available. For example, if a student feels that a minor character is actually the hero of the novel, it is better to point out a specific passage contradicting the contention and ask the student how the passage relates to his or her point than to tell the student, "No, you're wrong." Alternatively, one way to prevent the problem of wrong answers is to avoid questions for which there are immutable, fixed answers. In this case, questions requiring students to explore options or values or to weigh opinions are preferable.

One caution is in order: moving from a student's wrong answer, without comment, to another student who you think will supply a correct answer can create problems. Such a shift may make the first student feel ignored and may in essence place the correctly answering student in the position of doing your "dirty work" for you. You may want to ask a second student the same question previously answered incorrectly—but you owe the first student a response and an acknowledgment.

Encouraging Student Answers

The ephemeral classroom atmosphere probably has as much to do with the encouragement of student answers as any other factor. When students feel that they may take risks in the classroom, may possibly answer incorrectly and yet not face disapproval or ridicule, it is likely that student answers will be frequent. Nevertheless, there are certain "prompts" that can encourage student answers and facilitate the management of classroom interaction.

Room arrangement. When students see only the back of others' heads, it is difficult to encourage discussion or lively interchange with anyone but the teacher. A circle or horseshoe arrangement of desks can help this situation.

An unhurried atmosphere. Teachers who convey calmness can do a great deal to encourage student answers. An unpressured environment gives students an opportunity to think and answer. Questions that are not presented in a challenging manner or in a rapid-fire fashion can contribute to an unhurried atmosphere.

Delivery. Teachers need to begin questions with a question word (*who, what*) and not with a student's name or a lengthy general statement. Scanning the entire class as the question is delivered may help to foster attentiveness.

Wait time. A pause after a question indicates, as it should, that the question requires some thought, some deliberation, before being answered. It gives students a useful time to consider their basis for response. Additionally, students will be more willing to answer if they know that the teacher is willing to wait for them.

Behavior and body language. One way to encourage a student to continue a comment is to maintain eye contact. Conversely, breaking eye contact will usually stop student comments. Head nods and smiles also encourage student response, while the reverse—frowns, head shakes—does not. Finally, as with broken eye contact, turning away from students will discourage further communication. Turning toward students and keeping the upper body free of crossed arms (a hostile, "closed" position) encourage students to continue talking.

Praise. Within limits, praise of student answers is an obvious reinforcement tactic. "I agree" or "I think that was a perceptive comment" can cause students to be encouraged regarding answers. On the other hand, excessive praise can be binding and can cause a student to be hesitant to contribute again. For example, if you tell a student that an answer is "the most intelligent, most mature I've ever had from a student," or some such other well-meant but rather excessive praise, then the student might be unwilling to try to equal the performance in another discussion. Similarly, other students may not be willing to attempt to match the comment.

Student behavior. Sometimes students react to comments or to questions by facial expressions and body language rather than by raised hands. It can encourage students to express themselves

not by calling on them directly—which may be seen as a threat—but by repeating their behavior to them, thus inviting them to speak. For example, some teachers might say, "Sarah, you're frowning. Do you have something to add?" Or, "Steve, I saw you nod your head. Why?" The repetition of the student's behavior gives the student an opportunity to explain the behavior or, in some cases, to decline an explanation. In either case, the teacher has attempted to elicit an answer and also has established his or her careful observation of the class.

Student comments. When a student makes an especially good point in class, use the incident as a positive factor in the classroom environment. For example, if a student has pointed out an exception to a usage rule, the next time an exception comes up in the discussion, repeat the student's name and allude to the previous comment. Thus, students know that other student comments are valued—and remembered—and they may be more willing to contribute answers. Likewise, asking students to relate their comments to other student comments can encourage interaction and the generation of questions. For example, asking Mary, who has just raised a good point, "How does your comment relate to Eva's?" may encourage the two to interact.

Helping Students Generate Questions

An alternative to teacher-initiated questions that direct students to respond from memory or experience is to let students generate questions. Such questions may be directed to the teacher, to other students, or to themselves during the process of trying to make sense of a situation or text. Students naturally generate questions only when they are confronted with a new idea so intriguing that questions come easily as a matter of course. While it is not always easy to create this kind of situation in the classroom, the following suggestions may help to make it possible:

Atmosphere. Students will not generate their own questions in an atmosphere where the act of asking a question is interpreted as a failure to understand or even to pay attention. Obviously, they must be in an atmosphere where they feel the exchange of ideas is a healthy, nonthreatening one.

Small groups. In the relatively nonthreatening atmosphere of a small group, students might be more interested in generating questions and better able to do so. Certainly, the limitations of

large group activity are reduced in the small group: the topic can be more flexible, the time between student comments can be reduced, the tension can be lessened. In such a setting, students may be more receptive to forming their own questions on a specific topic or assignment.

Teacher statements. To provoke students into questioning, a teacher may make a statement that is obviously absurd or may present a contradiction in a declarative statement. Both strategies may stimulate student questions.

Student tests and study questions. After students have studied a work of literature or have been exposed to a concept or idea, they can be asked to generate questions. The students, in turn, could answer the questions or pose them to members of their group or to the class as a whole. It is possible, with some teacher guidance, to have students construct partial or whole tests as well as study guides and questions for review games.

We also offer some games and activities that may encourage students to generate questions.

Solve the Situation (Logic)

Problems found in logic books (or student-created problems) can teach students to generate appropriate questions and to synthesize information from other students' questions. Many teachers find that students really listen to each other's questions and the answers given and that they become impatient when others ask questions already answered (they want new information). If the logic problem remains unsolved, students return the next day remembering the details and having thought about the problem. Allot only five or ten minutes at the end of class to answer questions about the situation. It may take days to solve, but the enthusiasm remains!

Sample Problem Situation:

A husband and wife drive to work together each day. Their office is a half-hour drive from their house, but each night they leave work at 5:00 and don't reach their house until 6:30. Why? (Answer: They live and work in different time zones. The drive home still takes one half hour, but when they cross into the time zone of their house, they must advance their watches by one hour.)

As students ask questions, the teacher answers in any creative but not misleading way. For example:

Student: Do they drive a different road on the way home?
Teacher: No, they always take the same highway.
Student: Do they stop for dinner at a restaurant?
Teacher: No, they always eat dinner at home.
Student: Does it take them an hour to pick up their children from the babysitter?
Teacher: No, the babysitter lives right across the street from their house.

What's the Question? (Language, Literature)

While *Solve the Situation* begins with an answer and students generate questions in seeking a solution, in *What's the Question* a teacher supplies a list of answers to which students create the questions. Sometimes teachers may challenge students to generate as many questions as possible for each answer. For example:

Teacher: The answer to the questions is *bat*. Does anyone have any questions?
Student: What is the implement used in baseball to hit the ball?
Student: What is the broad stick used in cricket?
Student: What is a nocturnal flying mammal?
Student: What do people sometimes do with their eyes to show surprise?
Student: What do people do with their eyes when they flirt?
Student: What is an ugly, nagging woman sometimes called?
Student: What is an abbreviation for battalion?

Picture Perfect (Communication)

This activity provides an opportunity to receive information, pass on information, ask questions to clarify information, formulate spatial relationships, and synthesize information. The teacher draws a simple picture, such as the one in Figure 6. A surprising number of details are present in the picture. The first student in each row studies the details in the picture and returns it to the teacher. Those students then turn to the students immediately behind them and describe the picture. The receiving students, who have not seen the picture, can ask as many questions as necessary to clarify or fill in the details of the mental picture they are forming. When receiving students in each row are satisfied that they have the picture in mind, they turn and describe the picture to the students immediately behind them. After the last student in each row receives a description and asks questions to gain additional information, this student draws a picture based on that

mental image. The winner is the row whose picture is closest to the original drawing.

The first exchange may be similar to the following:

> Student giving the information: There is a one-story house with a door, two windows, and a chimney.
>
> Student receiving the information: Where are the windows in relation to the door?
>
> Giving student: A large picture window is to the left of the door; a smaller window is to the right.
>
> Receiving student: What type of windows are they?
>
> Giving student: They have panes. The small one has four panes. The large one has more, maybe six or eight.
>
> Receiving student: Okay. Where is the chimney?
>
> Giving student: The top of the chimney appears above the left side of the roof edge. A tree is also at the left side of the house and a child's wagon is sitting at the end of a walkway leading to the front door.
>
> Receiving student: Okay. I think I see it.

A number of details have been lost. Should someone later in the activity ask whether there is smoke rising from the chimney, what the height of the tree is in relation to the house, how the wagon is situated, or of what material the walkway or roof is constructed, the student giving information would be unable to respond. In a follow-up discussion, the class explores the communication process, the information that was lost, and the questions that could have been asked to elicit full details. In later practice with other pictures, students have

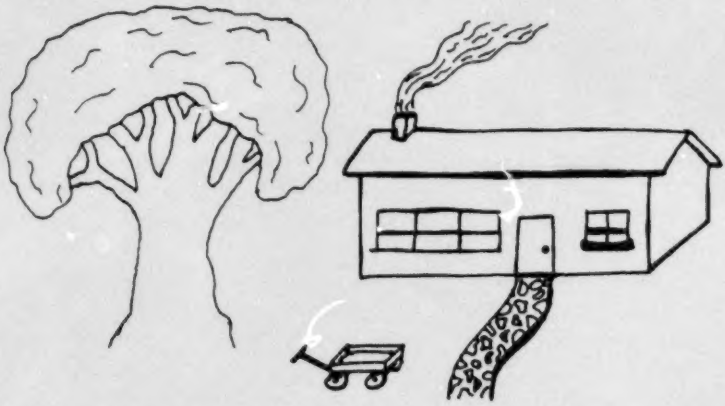

Figure 6. Sample illustration for *Picture Perfect*.

the experience needed to improve their skills in asking and answering questions involving finite information.

Twenty Questions (Literature)

A rendition of this children's game can help students learn how to frame useful questions and to synthesize the information received from all answers. Students are divided into two teams. In turn, students from each team ask questions that can be answered "yes" or "no." The total number of questions for each team is ten. A team's score for each game is ten minus the number of questions asked and any wrong guesses. The team with the highest score wins. The scorekeeper can be rotated among the students as can the person answering the questions. The teacher or student begins by posing a problem, such as "I'm thinking of a character from our reading this term." Problems from literature might include authors, characters, titles, or literary terms.

The following exchange is an example of a question/answer dialogue in which Team Two would receive seven points (ten minus the three exploratory questions; the question eliciting the correct answer does not lose a point):

Answerer: I'm thinking of a character from our reading this term.
Team One: Is the character male?
Answerer: Yes.
Team Two: Is the character in a novel?
Answerer: No.
Team One: In a play?
Answerer: Yes.
Team Two: Is the play *Julius Caesar*?
Answerer: Yes.
Team One: Is he one of the conspirators?
Answerer: Yes.
Team Two: Is it Brutus?
Answerer: No.
Team One: Does he have "a lean and hungry look"?
Answerer: Yes.
Team Two: Is it Cassius?
Answerer: Yes.

Breaking the Code (Language)

The following sentence patterns contain consistent symbols for the parts of speech:

1. ○ □ △ ♡ ○ □
2. □ △ □ ◇
3. ○ □ ♡ ○ ▽ □ △ ▽
4. ○ ▽ □ △ ○ ▽ □

To break the code, students must ask themselves, "How do English sentences usually begin?" Then they look at all the sentences and posit, "Is the square a noun?" and test the idea by substitution. Grammatically correct English sentences can be written for each pattern when the code is broken. Likewise, students can develop their own codes for others to solve.

Solution:

○ = article; □ = noun; △ = verb;

◇ = adverb; ♡ = preposition; ▽ = adjective

Several questions must be asked in order to solve the code: If the square is a noun, what kinds of words come before nouns? What then could be the circle and upside-down triangle? Given the position of verbs, which symbol could be a verb? If I substitute words for the symbols I think I've solved, what seems to be the function of the heart?

Journals (Literature, Composition)

Journals are an excellent place for students to record questions: probing questions, puzzling questions, or mind-stretching questions. Some possible situations follow.

1. Pretend there is someone who knows the answers to all questions. You are allowed to ask only three questions. What would you ask?
2. Make up ten "crazy-seeing" questions, beginning with "What if." For example: What if jellybeans grew on trees? (Alternative questions involve "crazy-hearing" or "crazy-feeling" situations.)
3. People's actions are often confusing, hurtful, contradictory, or even funny. Write ten questions that reflect interactions with others. For example: Why do we sometimes hurt the ones we love most? Why is it that the checkout line I'm in is always the slowest?
4. If we jumble literary characters or authors, strange things might occur. For example: What would change if Edgar Allan Poe had written *The Scarlet Letter*? What would happen if Jane Eyre

walked into an Ernest Hemingway novel? Some questions might serve as the basis for a class discussion of style, tone, character development, or theme.

Conclusion

In classroom practice, questioning is a skill, a process, a strategy, an attitude, an art. Although we have presented components of the questioning act—classroom environment, teaching strategies, response techniques, and a questioning model—all must operate holistically. One part used singly, in all likelihood, will have little effect on students' abilities to think critically. For instance, developing dense questions based on the model will not solve the problem of teacher behaviors that cut discussions short. Conversely, changing the classroom environment will not lead to critical thinking if the topics for discussion do not offer the possibility of exploring more complex subjects.

The Questioning Circle provides a conceptual framework for classroom interaction. The model, while appropriately applied to English language arts in general, has particular implications for literature study: the model allows the student to respond from experience while striving to integrate those personal responses with the universality of literature.

We have also presented some activities that will help students develop their own questioning skills. These activities are offered only as examples, serving primarily to demonstrate how to structure an activity so that the emphasis is placed on student questions rather than student answers. Too much dependence upon a stimulus/response model, with teachers providing questions and students reacting with answers, can create passivity and intellectual dependence. To question, to think critically and independently, students need the opportunity to construct their own inquiries, not merely to respond to the inquiries of others.

While the balance of teacher-initiated and student-initiated questions is always an individual decision, we feel a mixture is healthy, fostering a classroom environment where learning is stimulating and where questions provide avenues for exploration, not merely measures of retention. Considering the heavy use of questioning in the typical English language arts classroom, we owe it to ourselves and to our students to examine our questioning techniques—to refine what we ask, how we ask, what we do with responses, and how we motivate students' critical thinking.

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